

# APPARATUS AND METHOD FOR AN INTERFACE UNIT FOR DATA TRANSFER BETWEEN PROCESSING UNITS IN THE ASYNCHRONOUS TRANSFER MODE

## 5    **Abstract of the Disclosure**

In a data processing system have a master-state data processing unit and at least one slave-state data processing unit, the data processing units can be provided with an asynchronous transfer mode interface unit **18** for transferring data cells there between.

10    The interface unit **18** provides and receives signals formatted in the Utopia protocol. The interface unit **18** includes processor acting as a state machine **181**, **184** and a buffer out memory unit **182**, **183** for buffering the data groups between the interface unit processor and the direct memory access unit of the data processing unit. The interface unit **18** can act in a receive mode and a transmit mode for a master-state data processing unit and can  
15    act in a receive mode **181**, **182** and transmit mode **184**, **183** in a slave-state data processing unit. An event signal provides an efficient exchange of transfer of data between the direct memory access unit **14** and the buffer memory storage unit **182**, **183** in the slave mode.

20